

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 487932AHB	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).
International Application No. PCT/NZ2003/000167	International Filing Date (day/month/year) 30 July 2003	Priority Date (day/month/year) 30 July 2002
International Patent Classification (IPC) or national classification and IPC Int. Cl. ⁷ B63B 21/00, E02B 3/20		
Applicant MOORING SYSTEMS LIMITED et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheet(s).

3. This report contains indications relating to the following items:

- | | | |
|------|-------------------------------------|---|
| I | <input checked="" type="checkbox"/> | Basis of the report |
| II | <input type="checkbox"/> | Priority |
| III | <input type="checkbox"/> | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| IV | <input type="checkbox"/> | Lack of unity of invention |
| V | <input checked="" type="checkbox"/> | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| VI | <input type="checkbox"/> | Certain documents cited |
| VII | <input type="checkbox"/> | Certain defects in the international application |
| VIII | <input checked="" type="checkbox"/> | Certain observations on the international application |

Date of submission of the demand 26 February 2004	Date of completion of the report 8 November 2004
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer ZBIGNIEW BIELAWSKI Telephone No. (02) 6283 2218

I. Basis of the report**1. With regard to the elements of the international application:***

- ☒ the international application as originally filed.
- ☐ the description, pages , as originally filed,
pages , filed with the demand,
pages , received on with the letter of
- ☐ the claims, pages , as originally filed,
pages , as amended (together with any statement) under Article 19,
pages , filed with the demand,
pages , received on with the letter of
- ☐ the drawings, pages , as originally filed,
pages , filed with the demand,
pages , received on with the letter of
- ☐ the sequence listing part of the description:
pages , as originally filed
pages , filed with the demand
pages , received on with the letter of

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/fig.

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims 1-43	YES
	Claims	NO
Inventive step (IS)	Claims 1-43	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-43	YES
	Claims	NO

2. Citations and explanations (Rule 70.7)Novelty (N) and Inventive Step (IS)

None of the Search Report citations or obvious combination of these citations discloses a vessel mooring system and a method of controlling thereof wherein the system comprises attractive force attachment element engagable with a surface of a vessel and displaceably engaged to a fixed mooring structure and wherein the attractive force between the surface of the vessel and the attachment element and the force between the attachment element and the mooring structure are being measured, than based on the result of the measurement and relationship between the two measured forces a response is generated as defined in claims 1, 15, 18, 23 or 24.

Therefore the invention defined in claims 1, 15, 18, 23 and 24 is considered to be novel and involving an inventive step.

Remaining claims rely on either claim 1, 15, 18, 23 or 24 hence these claims are also considered to be novel and involving an inventive step.

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

1. Claim 5 is not clear because it is not apparent whether "said fixed structure" (line 5) and "a base structure" (claim 1, line 4) is intended to be the same as, or different from, each other. I cannot therefore understand the scope of the monopoly being claimed. It is noted that in patent claims, different words are taken to be defining different things, however the context suggests that a single thing may be being referred to.

Also "mooring robot" (line 6) is misspelt.

A similar objection applies to claims 6 (line 8) and 7 (line 10).

2. Claim 10 is not clear because it is not apparent to which force the "which holding force" (line 7) is referring to.
3. Claim 12 is not clear because it is not apparent whether "attractive force attachment member" (lines 2, 4, 8, 10) and "the attractive force attachment element" (lines 1-2) is intended to be the same as, or different from, each other. I cannot therefore understand the scope of the monopoly being claimed. It is noted that in patent claims, different words are taken to be defining different things, however the context suggests that a single thing may be being referred to.

A similar objection applies to claim 13.

4. Claim 18 is not clear because it is not apparent whether "the fixed structure" (line 17) and "a base structure" (line 4) is intended to be the same as, or different from, each other. I cannot therefore understand the scope of the monopoly being claimed. It is noted that in patent claims, different words are taken to be defining different things, however the context suggests that a single thing may be being referred to.

A similar objection applies to claims 19 and 20.

5. Claim 26 is not clear because I cannot find an antecedent to "said variable attractive force attachment element" (line 3) when the claim is appended to Claim 24 or 25.
"A variable attractive force attachment element" is first defined in claim 29.

A similar objection applies to claims 27 and 28.